

## Preface

This volume is a collection of edited papers presented at the 12th International Conference on Fracture and Damage Mechanics (FDM2013), held in Sardinia, Italy. Previous meetings were held in London, UK(1999), Milan, Italy (2001), Paderborn, Germany (2003), Mallorca, Spain (2005), Harbin, China (2006), Madeira, Portugal (2007), Seoul, Korea (2008), St. Julian's Bay, Malta (2009), Nagasaki, Japan (2010), Dubrovnik, Croatia (2011) and Xian, China (2012)

The conference which was attended by researchers from 19 countries served as a forum to promote and exchange latest theoretical, computation and experimental research works on fracture and damage mechanics as well as structural integrity and durability.

The FDM2013 covers a wide range of topics: Fracture Mechanics, Failure analysis, Composites, Multiscale Modelling, Micromechanics, Structural Health Monitoring, Damage Tolerance, Corrosion, Creep, Non-linear problems, Dynamic Fracture, Residual Stress, Environmental effects, Crack Propagation, Metallic and Concrete Materials, Probabilistic Aspects, Computer Modelling Methods (Finite Elements, Boundary Elements and Meshless), Microstructural and Multiscale Aspects.

Several special sessions were organised by the member of the international Scientific Committee.

Quasi-static versus dynamic (Christine Espinosa); Surface treatments and coatings corrosion fracture and fatigue mechanisms (Sergio Baragetti); Environmentally assisted cracking (Jesus Toribio); Microstructure and Multiscale Modelling of Heterogeneous Materials (Zdenko Tonkovic) and Micro-mechanics approach to fracture (Alojz Ivankovic). Keynote addresses were given by Profs Gordon William of Imperial College London and Ray Pearson of Lehigh University.

The Editors would like to thanks the members of the Steering Committee and International Scientific Committee for their help and support that were essential to the success of the conference. Finally, we would like to thank all those who helped to organize this scientific event.

### Editors

A Milazzo and MH Aliabadi

# International Conference on Fracture and Damage Mechanics XII

## 17-19 September 2013, Sardinia, Italy

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